



Staff Instruction

Subject: Provision of FDR and CVR Documentation to the Transportation Safety Board of Canada

Issuing Office: Aircraft Certification

Activity Area: Rulemaking
File No.: 5009-32-2
RDIMS No.: 1917081-v1

SI No.: 551-004
Issue No.: 01
Effective Date: 2006-07-17

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1.0 INTRODUCTION

1.1 Purpose

The purpose of this Staff Instruction (SI) is to outline a procedure for providing digital flight data recorder (FDR) and cockpit voice recorder (CVR) documentation to the Transportation Safety Board of Canada (TSB) to allow familiarization with the technologies in use and the means of digital data readout.

1.2 Applicability

This document is applicable to Transport Canada Civil Aviation (TCCA) Headquarters and Regional personnel, including delegates.

1.3 Description of Changes

This document, formerly Aircraft Certification Staff Instruction (ACSI) No. 3 Issue 01, is reissued as SI 551-004 Issue 01. With the exception of minor editorial changes and updated references, the content is unaltered.

2.0 REFERENCES

2.1 Reference Documents

It is intended that the following reference materials be used in conjunction with this document:

- (a) Advisory Circular (AC) 551-002 Issue 01—*Flight Data Recorder Installation Calibration and Correlation Procedures*.

2.2 Cancelled Documents

As of the effective date of this document, ACSI No. 3 Issue 01, dated 1998-04-03—*Flight Data Recorder/Cockpit Voice Recorder Documentation Readout – Aircraft Certification Process*, is cancelled.

3.0 BACKGROUND

- (1) The arrangement of the recorded values in a data stream, the configuration, often varies from one FDR and CVR system to another. Consequently, accurate conversion of the recorded values to their corresponding engineering units or discrete states can be accomplished only when the configuration of data stream has been thoroughly documented.
- (2) The TSB has requested to take advantage of initial and post certification design approval activities that involve FDR and CVR installations to obtain documentation on the readout of FDR and CVR data recordings. The TSB has experienced a recurring problem with respect to the lack of adequate documentation for the configuration of data recorded by digital recorders and this would facilitate subsequent readout following the occurrence of an accident or an incident. AC 551-002 Issue 01 identifies the information for FDRs that would serve the TSB as an evaluation tool, and for the preparation of the respective conversion algorithms for the readout of FDRs and CVRs.
- (3) It is not the intent of the TSB to be viewed as an active participant in the design approval process as this is strictly a data gathering activity on their part.
- (4) Approval of an FDR or CVR installation is not dependent on the submission of FDR and CVR readout documentation to the TSB.

4.0 FDR AND CVR DOCUMENTATION FORWARDING

- (1) Headquarters and regional engineers involved in initial or post certification design approval activities, that includes the verification of substantiating data for digital FDR or CVR installations, shall advise their applicant to forward documentation on the readout of the digital FDR or CVR data, to the TSB to the attention of:

Manager, Recorders and Vehicle Performance Division
Engineering Branch
Transportation Safety Board of Canada
1901 Research Road
Gloucester, ON, K1A 1K8

- (2) For details on specific requirements of the TSB please contact the Manager, Recorders and Vehicle Performance Division by telephone at 613-998-3848.

5.0 CONTACT OFFICE

For more information please contact:

Policy Standards Coordinator (AARDH/P)

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